

ACVM | AMERICAN COLLEGE OF
VETERINARY MICROBIOLOGISTS



RESIDENCY TRAINING STANDARDS

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I. Objective

The objective of American College of Veterinary Microbiologists (ACVM) Residencies is to promote expertise and proficiency in a Recognized Veterinary Specialty (RVS) (bacteriology/mycology, immunology, virology, or parasitology) within the ACVM, which is an American Veterinary Medical Association Recognized Veterinary Specialty Organization (RVSO), by providing instruction and guidance through a structured residency program.

II. Definitions

AVMA – American Veterinary Medical Association

ABVS – AVMA American Board of Veterinary Specialties; this is the umbrella organization for veterinary specialties within the United States.

RVSO – AVMA ABVS-Recognized Veterinary Specialty Organization; e.g., the American College of Veterinary Microbiologists

ACVM – American College of Veterinary Microbiologists

RVS – Recognized Veterinary Specialty; a clearly defined unique subset of an RVSO based upon a species, discipline, or system related to that of the parent RVSO.

Program Advisor: The individual responsible for general program oversight, including, but not limited to: submitting the program registration form; overseeing the ACVM Residency Training Program at the approved site; integrity and continuity of the program; signing documentation verifying completion of the program by individual Residents; and correspondence with ACVM.

In general, the Program Advisor is a Diplomate in good standing of any RVS within ACVM. If an ACVM Diplomate is not available, then the Exam Committee may be petitioned to accept one of the following as a program advisor:

- Diplomate in good standing of a different RVSO within the AVMA American Board of Veterinary Specialties.
- Diplomate of the European Board of Veterinary Specialists, Fellow of the Australian College of Veterinary Scientists, or a Diplomate of the Royal College of Veterinary Surgeons

In order for an alternate Diplomate to be approved as a Program Advisor, a letter and current curriculum vitae must be submitted in advance to the Exam Committee through the ACVM Secretary. Further information may be requested by the Exam Committee before a decision is made to approve or deny the application.

Supervising Diplomate: An active ACVM Diplomate responsible for direct supervision of a Resident while this person is in clinical training. ACVM Diplomate Program Advisors may serve as Supervising Diplomate. Supervising Diplomates may not supervise more than three (3) Residents at one time, but may accept new Residents if one or more of their current Residents is scheduled to complete the Program within 3 months.

Residency Committee: A committee comprised of 3 or more individuals chaired by the Supervising Diplomate. The committee may consist of other ACVM Diplomates and specialists

from other RVSOs or diplomates certified by other international veterinary specialty colleges as well as individuals with pertinent PhD credentials as deemed appropriate by the Supervising Diplomate. The Committee provides guidance and reviews the progress of the Resident in the program. The additional 2 members may also assist in the selection of the Resident.

A residency training program in veterinary microbiology is the joint responsibility of the American College of Veterinary Microbiologists and an active Diplomate acting as a representative of the College (Program Advisor). A residency training program also requires the support of other specialists that act as mentors and who participate in training the Resident. A residency training program is an intense, intimate partnership in learning that can only be accomplished with frequent and regular interactions and communication between a Supervising Diplomate and his/her Resident.

III. Summary of the ACVM Residency Program

The ACVM residency program shall consist of a minimum of two (2) years of supervised training and clinical experience in the science and practice of disciplines in microbiology as applied to veterinary medical science.

Graduate studies may be included in the residency program for achievement of an advanced degree; however, a total of one hundred (100) weeks (two (2) years minus two (2) weeks of vacation per year) must be devoted specifically to clinical training in Veterinary Microbiology as defined by ACVM, and must include case responsibility (see IV).

Evaluation of the Resident shall be performed by the Residency Committee at six (6)-month intervals. Residents are required to submit logs and other information (see V. Responsibilities of the Resident) to the Committee as part of this evaluation. Materials and evaluations are forwarded to the Program Advisor who may add comments, if desired, prior to submitting to the ACVM Exam Committee (via the ACVM Secretary). It is the responsibility of the Resident, Resident Committee, and the Program Advisor to ensure all documentation is provided at the required times. No exceptions will be made.

Application for credentialing to sit for the ACVM examination can be made during the second year of the training program as outlined in the ACVM Bylaws. All residency requirements must be completed and approved prior to examination.

In general, no partial credit for residency programs is permitted. A Resident, deciding of his/her own accord to request a temporary leave from the residency program, will submit a letter to his/her Residency Committee with reasons for the request. The Program Advisor will then forward it, along with the Committee's recommendation, to the Exam Committee. If the Resident decides to continue the program, the Resident must submit a letter petitioning the Residency Committee to resume the residency program. The Program Advisor will then forward it, along with the Committee's recommendation, to the Exam Committee for final determination. If a prolonged period of time has passed (i.e. more than 1.5 years) the Exam

Committee may require the individual pursue certification by way of Routes 1, 2, or 4, as defined in the Bylaws.

If a residency program is terminated by the sponsoring entity, the Program Advisor will provide a letter to the Exam Committee detailing the Resident's experience to consider approving additional experience credit on a case-by-case basis.

IV. Detailed Description of a ACVM Residency Training Program

A. Scope of the training program

The goal of the residency training program is to provide opportunity for the development of knowledge and skills through exposure to a wide variety of microbiological diseases of animals, resulting in the ability to supervise a microbiology diagnostic laboratory.

The objective of the program is to:

1. promote aptitude and clinical proficiency in veterinary microbiology diagnostics and diagnostic medicine
2. provide learning opportunities to review in-depth the fundamentals of basic sciences as applied to the practice of veterinary microbiology;
3. provide instruction, mentoring and supervision of the Resident to adequately prepare him/her for the ACVM certification examination;
4. provide a suitable environment to facilitate training. Such an environment requires a commitment by the Program Advisor, Supervising Diplomate, support staff and administration, appropriate resources and facilities, and appropriate animal caseload.

B. Duration and distribution of time

The ACVM residency program is based on the common clinical residency duration of two (2) years (104 weeks with two (2) weeks of vacation per year). One week is defined as at least 5 days of at least 8 hours. A minimum of 70% of the Resident's time must be devoted to rotations crucial to advanced training in the particular RVS (core rotations); the remaining 30% of time will consist of related rotations. Because the 104-week program includes a total of four (4) weeks of vacation, the program must contain at least seventy (70) weeks of core training and thirty (30) weeks of related rotations for a total of 100 weeks of supervised clinical training and practice.

Residencies with advanced degrees or concurrent residencies (minimum of 36 months) should likewise base calculations on a minimum of 100 weeks of clinical training even though various disciplines may be scheduled over the entire three (3) year period.

D. Program Requirements

For an ACVM Residency Training Program to be active, the:

1. **Program Advisor** must submit a program registration form (Appendix A) within 1 month of July 1st (or the date on which the residency training program initiates a new year) of each year to the Secretary of the ACVM.
2. All **Residents** must submit the Resident registration form (Appendix B), through their Program Advisor, within 30 days of the initiation of their program to the Secretary of the ACVM. Employment of a Resident does not guarantee approval of the program by the ACVM.

Training must take place at a facility with a faculty/staff active in the RVS. The facility must have diagnostic services consistent with the current standard of specialty practice as well as appropriate infectious disease caseload in the RVS. In addition, the following items must be available:

- **Library:** a library must be accessible which contains recent text books and current journals representing all recognized clinical disciplines and basic sciences.
- **Medical Records:** a comprehensive and retrievable filing system for medical records must be available, as well as appropriate photographic equipment.

V. Responsibilities of the Resident

A. Case responsibility

The Resident will be expected to participate in all aspects of case management including sample receiving, sample preparation, performance of essential tests, client communication, results reporting, clinical case interpretation, and microbiology consultant. Timing of each component may vary depending on the stage of the training program.

B. Diagnostic Logs

A diagnostic log must be maintained by the Resident and will list the following:

1. Running total of cases. Number consecutively throughout the program. These are cases the Resident actually works through from beginning to end. This does not include cases the Resident observes with no actual hands-on experience or input provided, but cases joined late or where substantive input was provided should be listed and the contributions described. List by submission date.
2. Number of samples evaluated for each case submission (e.g., 50 milk samples, 1 urine bacterial isolate, 7 serum samples).
3. Date case entered the facility.
4. Date case finalized (i.e. all results reported and follow-up contacts concluded).
5. Host species (use full name).
6. Applicable ACVM RSV. List which RSV this case represents. It is expected that at least 70% of all cases the Resident participates in will represent the RSV the Resident is striving for. It is also anticipated some cases will cross specialties (e.g., Virology & Immunology) in which case both shall be listed.
7. Tests performed. List general test (e.g., ELISA) followed by brand name (e.g., IDEXX 4DX Plus) if applicable.
8. List whether primary or secondary responsibility. Residents are considered primary when they have complete case management responsibility. Residents are considered

secondary or assisting if the Supervising Diplomate or other persons are responsible for a significant portion of case management.

9. Client consult - yes/no; if yes, indicate if a Diplomate or Committee member was present and advised during the consult.

C. Publications

Residents are required to submit proof of acceptance for publication of one (1) case report and one (1) first author paper in an appropriate peer-reviewed journal. Appropriate journals are those that are included in the reading list for the RVS. Acceptable first-author peer-reviewed publications will include:

1. Original research
2. Comprehensive retrospective studies
3. Case Reports
4. Short/brief communications
5. Comprehensive Review Article

Conference proceedings, clinical vignettes, letters to the editor, and serial features (e.g., What's your diagnosis?) are generally not acceptable.

The manuscript topic must be in the RVS for which the Resident is seeking certification. The manuscript format will depend on the journal to which it will be submitted.

The data that provides the basis for the two publications must be different, but the broad topic can be the same (e.g. 2 different papers about BVDV are acceptable).

The manuscripts must have been published with three (3) years of the date of application. For example, if the application date is April 15, 2016, the date of publication cannot be prior to April 15, 2013.

Proof of publication or official acceptance for publication must be received by the Exam Committee by November 1 in order to sit for examination in December of that year. Official acceptance for publication consists of a letter (electronic or otherwise) from the journal indicating that the manuscript has been accepted for publication.

D. Presentations

Formal rounds, case presentations, journal clubs, and lectures by the Resident are required and it is recommended that there be a minimum of one (1) of the preceding per week during the program. These shall be documented by the Resident and included in the semi-annual report.

Residents must make a minimum of four (4) presentations of at least fifteen (15) minutes duration in a formal setting during their residency, and one presentation of at least 60 minutes after the first year of their residency. Short presentation topics must be different from each other and directly related to the RVS. These presentations may be given to faculty or students in a teaching institution or to local, regional, national or international professional meetings. It

is recommended, if possible, that at least two (2) presentations be given at national or international meetings. The Supervising Diplomate, Program Advisor or designated substitute must be present to critique each presentation and provide a written evaluation for the semi-annual report.

E. Independent study/special projects

Development of one (1) or more research projects related to the RVS is encouraged. However, the time required to complete such a project should not reduce, but rather supplement, the time spent in the necessary core disciplines.

F. Semi-annual Evaluation

Every six (6) months, before January 15 and July 15, Residents must submit evaluation materials to the Program Advisor including the following:

1. Residency program summary form
2. Case log
3. Listing and evaluation of oral presentations

These materials will be used to generate and send a letter from the Supervising Diplomate/Program Advisor to the ACVM Exam Committee or designated subcommittee (through the ACVM Secretary) indicating satisfactory or unsatisfactory progress over the last six (6) months.

VI. Responsibilities of the Program Advisor

- Registering the program with ACVM
- Informing ACVM of substantial changes in the residency program, such as availability of ACVM Diplomates for direct supervision
- Providing the infrastructure for the Resident(s) to prepare the materials required by ACVM
- Monitoring the overall progress of the Resident(s)
- Certifying satisfactory progress and completion of the residency program

VII. Responsibilities of the Supervising Diplomate

- Direct supervision of the clinical activities of the Resident(s)
- Verifying and approving the case-log and other documentation required by the ACVM

VIII. Responsibilities of the Residency Committee

- Provide guidance to Resident
- Reviews the progress of the Resident in the Training Program

IX. Responsibilities of the ACVM and its respective boards and committees

- The Exam Committee shall evaluate and make a decision on residency program applications and individual residency training program applications.

- The Exam Committee shall review the 6-month reports submitted by the Residents, including case-log and other required materials, and provide review reports to the Residents with copies to the Program Advisor.
- The Exam Committee shall review the credentials application packages.
- The Board of Governors shall decide on the recommendation on credentials applications made by the Exam Committee.

APPENDIX A

PROGRAM REGISTRATION FORM

Please submit the following information to the Secretary of ACVM. For the Training Program to be considered active, this information must be received no later than July 31st (or within 30 days of the date on which the residency training program initiates a new year).

1. Introductory letter written by the proposed Program Advisor describing the purpose and intent of the training program along with starting and ending dates. The purpose must include which RVS(s) is the focus of the training program.
2. Description of facilities and caseload to include:
 - a. Approximate number of tests performed each year, types of tests, and types of specimens, categorized by RVS. If the training program does not include a particular RVS, please so state.
 - i. Bacteriology / Mycology
 - ii. Virology
 - iii. Immunology
 - iv. Parasitology
 - b. Facilities description including laboratory space, equipment type, and photographic capabilities.
 - c. Medical records management system
 - d. Library
3. Personnel
 - a. List professional personnel (i.e., those with a DVM or equivalent degree) involved in the 104 weeks of the Resident Training Program. Give name, degrees/certifications and whether the person will have direct supervision of the Resident.
 - b. List paraprofessional personnel (i.e., those without a DVM or equivalent degree) involved in the 104 weeks of the Resident Training Program. Give name, degrees/certifications and whether the person will have direct supervision of the Resident.

For personnel listed in 3a and 3b, provide a current CV as outlined in 4 below.
 - c. List ancillary personnel and support staff, if appropriate, in direct support of the Resident Training Program. List only those individuals providing program support, not those involved in actual training.
4. Current curriculum vitae from the Program Advisor and CVs from Supervising Diplomates and other faculty/specialists who will be directly involved in Resident training. The CVs must include:
 - a. Full name, degrees, certifications, job titles, and areas of specialty

- b. Business or mailing address, phone numbers where the individual can be reached, email address
- c. College attended with starting and ending dates and degrees or certificates awarded
- d. Other veterinary training, including internships, residencies, fellowships, etc, including names of institutions and starting/ending dates
- e. Clinical service responsibilities, including which section, approximate schedules in weeks or months
- f. Teaching responsibilities, names of courses, types of students (e.g., veterinary, graduate, technician)
- g. Previous 5 year list of publications, proceedings, and/or literature categorized as peer-reviewed and non-peer reviewed in the traditional sense; if the individual is early career, please so indicate
- h. Professional memberships: list current memberships ONLY and level of involvement (e.g., Association of Shelter Veterinarians, member)

APPENDIX B

NEW RESIDENT APPLICATION

When a new Resident is identified, the following must be sent to the Examination Committee via the Secretary of ACVM. This must be done within 30 days of the beginning of the program. If notice is not sent, then the Resident is considered unapproved. ACVM will not retroactively approve a Resident.

- A. Name of Resident
- B. Start Date
- C. CV of Resident (using format found in Appendix A)
- D. Names of Resident Committee members
- E. CV of Resident Committee members, if not already on file with program registration.

After approval, ACVM will send a welcome letter to the Resident.

APPENDIX C

EVALUATION OF PROGRESS

The following components must be approved by the Residency Committee (including Supervising Diplomate) at each semiannual evaluation.

- A. Supervising Diplomate letter
 - a. Must describe the progress in the Resident's clinical abilities, knowledge base, communication skill and other requirements over the past six (6) months. Concerns or issues to be addressed by the Residency Committee must be included. Sufficient detail must be given such that there is clearly demonstrable progress from the previous evaluation period.
- B. Diagnostic log
 - a. The Resident is responsible for document each case concisely and accurately.
 - b. The Supervising Diplomate is responsible for reviewing the log and verifying the information is accurate.
 - c. The diagnostic log may be disapproved (not acceptable) if insufficient cases are seen or the log is not reflective of the 70/30 split in core training / related rotations.
- C. Presentation list and associated evaluations
 - a. If evaluations of any presentation are not considered acceptable, an improvement plan must also be included.